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February 27, 2009

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, Arizona 85007

RE: PVNGS SEMI-ANNUAL REPORT
DECISION NO. 69663
DOCKET NO. E-01345A-05-0816, E-01345A-05-0826, E-01345A-05-0827

Pursuant to Decision No. 69663:

> "Arizona Public Service Company shall file with Docket Control as a compliance item in this Docket, a semi-annual report describing plant performance, explaining any negative regulatory reports by the NRC or INPO, and providing details of corrective actions taken, until further order of the Commission."

Enclosed please find the semi-annual report for the Palo Verde Nuclear Generating Station for the period of July 1 through December 31 of 2008.

If you have any questions, please call Jeff Johnson at 602-250-2661.

Sincerely,

Leland R. Snook

LRS/bgs

cc: Brian Bozzo
Ernest Johnson
Terri Ford

Arizona Corporation Commission
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SEMI-ANNUAL REPORT
PALO VERDE NUCLEAR GENERATING STATION
IN COMPLIANCE WITH DECISION NO. 69663
FOR THE PERIOD OF JULY 1, 2008 THROUGH DECEMBER 31, 2008

In Decision No. 69663, dated June 27, 2007, the Commission required APS to submit a semi-annual report describing plant performance and explaining any negative regulatory reports by the Nuclear Regulatory Commission ("NRC") or the Institute of Nuclear Power Operations ("INPO") as a compliance item in Docket No. E-01345A-05-016, et al. APS submits this report in compliance with the requirement for the reporting period of July 1, 2008 through December 31, 2008.

PERFORMANCE OVERVIEW

The three Palo Verde Nuclear Generating Station (PVNGS or Palo Verde) units generated over 8.5 million MWh for APS in 2008, providing over 28% of the Company's retail customer electricity requirements for the year. Any planned or unplanned outages experienced during the reporting period, including applicable net replacement costs, have been described in the Company's PVNGS outage reports that have been filed with the Commission in accordance with other compliance requirements in Decision No. 69663.

INPO REPORTS

The Institute of Nuclear Power Operations did not issue any reports for PVNGS during the reporting period.

NRC REPORTS

The Nuclear Regulatory Commission ("NRC") issued the following three reports during the reporting period that fall within the scope of this report:

- NRC Integrated 4/1/08 through 6/30/08 Inspection Report 2008003
- NRC Integrated 7/1/08 through 9/30/08 Inspection Report 2008004
- NRC Security Baseline Inspection Report 2008402

Full copies of each of these reports can be found on the NRC website at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/listofrpts_body.html

NRC Reactor Oversight Process inspection findings are classified by color based on their safety significance. All findings identified in these reports are classified as very low safety significance "Green" finding. These findings were also classified by the NRC as "non-cited" violations, which mean that the findings do not require a written response to the NRC from Palo Verde.

Inspection findings fall into three categories, which are differentiated by how the violation was identified. "Licensee-identified" findings are those findings identified by Palo Verde employees and documented through programs or processes in place at Palo Verde and for which the NRC confirms that the licensee has made effective evaluations and has taken (or will take) appropriate corrective actions. "NRC-identified" findings are those findings that were initially identified by NRC inspectors or those which the licensee had initially identified but in the NRC's estimation had not fully evaluated or had not taken appropriate actions to correct. "Self-revealing" findings are those that reveal themselves to either the NRC or the licensee through a change in process, capability or functionality of equipment, operations, or programs during routine operation.

Although licensee-identified findings are mentioned in NRC reports, the NRC does not list these on their website and those findings are not included herein. Consistent with the Company's prior semi-annual filings, only NRC-identified and self-revealing findings are included in this report.

The following summarizes, for each of the NRC reports, a description of the findings made and the corrective actions taken.

NRC Integrated Inspection Report
05000528/2008003, 05000529/2008003, and
05000530/2008003 issued August 14, 2008

The Integrated 4/1/08 – 6/30/08 Inspection Report 2008003 noted three NRC identified findings and six self-revealing findings. As stated earlier, each of these findings was found to have very low safety significance and therefore all were determined to be Green findings.

The first self-revealing finding involved implementation of a troubleshooting procedure to resolve a discrepancy with a work instruction. Specifically, personnel did not resolve a problem with a work order prior to evaluating a breaker that failed to trip, resulting in the loss of non-vital electrical systems. Corrective actions included correction of the work order and coaching of personnel involved.

The second self-revealing finding involved implementing a procedure when a valve was found to be incompletely closed, resulting in an inadvertent transfer of water from the reactor coolant system to a water storage tank. Corrective actions included increased training, procedure revisions, and the issuance of an operations "lessons learned" communication to operators.

The third self-revealing finding arose from personnel not ensuring material compatibility of plugs in the condenser air removal system, which resulted in plant shutdown due to above normal levels of sodium. Corrective actions included replacement of the tube plugs, enhancements to training, procedure changes, and increased tube plug inspections.

The fourth self-revealing finding involved failure to follow procedures for proper control of ignition sources for welding operations, which resulted in a small fire that was promptly extinguished. Corrective actions included work stoppage, completion of a prompt human performance investigation and a safety stand down briefing for the crew.

The fifth self-revealing finding involved a main feedwater isolation valve that would have been unable to achieve fast closure if a main steam isolation signal was sent. There were no adverse safety conditions or implications as a result of this event. The valve was replaced and procedures were revised to establish and implement enhanced maintenance procedures.

The sixth self-revealing finding involved maintenance personnel entry into a tendon gallery access shaft without implementing proper procedure controls to ensure the plant exhaust system remained operable. Corrective actions included completion of a case study of plant exhaust system issues and personnel briefing on the study and the procedure. An annual self assessment will also be required to periodically assess personnel awareness of the procedure requirements for entry into areas that impact plant exhaust system operability.

The first NRC-identified finding involved proper washer installation in a main steam spring hanger during maintenance. Corrective actions included installation of the proper washer, enhanced training, a prompt human performance evaluation and development of detailed drawings for the hangers.

The second NRC finding was identified when operations personnel did not promptly declare a safety injection tank ("SIT") inoperable when a very small crack was identified in a valve fitting on the top of the tank. The tank received systematic additions of nitrogen to maintain the over pressure at required levels

to ensure it would have been able to perform its safety function. During a routine containment entry, the SIT tank was checked by a maintenance crew and a leak was identified; however, the tank was not declared to be inoperable for 14 hours. The tank was then declared inoperable because the very small crack in the weld impacted the ability of the tank to the Code-compliant. Corrective actions included repair of the valve fitting, and verification that similar valves on the other safety injection tanks were not leaking. This repair required plant shutdown and upon completion, the plant was returned to service. The need for timely declaration of inoperability was addressed with employees through additional training and procedure revisions.

The last NRC-identified finding involved emergency planning training for control room operators. During the training session, the scenario was not properly classified as a site area emergency and the training documentation was not promptly corrected. Corrective actions included face to face training of emergency coordinators, revision of the job performance measure, and enhanced operator training.

NRC Integrated Inspection Report
05000528/2008004, 05000529/2008004, and
05000530/2008004 issued November 12, 2008

The Integrated 7/1/08 through 9/30/08 Inspection Report 2008004 noted four NRC identified findings and no self-revealing findings. Each of these findings was found to have very low safety significance and therefore all were determined to be Green findings.

The first NRC-identified finding addressed the implementation of procedures to ensure the essential spray ponds would remain operable during severe weather. In the case of high winds, it was possible that unsecured equipment or material could have blown into the spray ponds, which could impact their safety function. Corrective actions included securing the equipment and material, revising procedures to clarify requirements when placing equipment around the essential spray ponds, and personnel coaching.

The second NRC-identified finding involved ensuring that the essential spray pond system was reviewed for operability when chlorine levels were found to be above normal limits. Corrective actions included confirmation that the spray pond was operable and changes to associated chemistry guidelines to ensure a representative spray pond sample is obtained promptly when chemistry changes are identified that could affect spray pond operability.

The third NRC-identified finding addressed promptly correcting a deficiency associated with the refueling water tank in a timely manner. The deficiency involved sealing refueling water tank instrument pit openings to prevent rain water intrusion, which operating experience shows could potentially

result in instrument failures. Corrective actions included sealing the openings as required, a review of all actions intended to ensure the pit openings were closed properly, and procedure revision.

The fourth NRC-identified finding involved the requirement to implement a leak test program for piping and valves that were no longer used but are still connected to the safety injection system. Corrective actions included a walk down of the valves in question, confirming there was no evidence of leakage, and the addition of the valves in question to the leak testing program.

NRC Security Baseline Inspection Report
05000528/2008402, 05000529/2008402, and
05000530/2008402 issued November 21, 2008

NRC Security Baseline Inspection Report 2008402 discussed an inspection that was completed on October 30, 2008. One NRC-identified finding of very low security significance was discovered. This deficiency was promptly corrected or compensated for, the condition was entered into the PVNGS corrective action program, and the plant was in compliance with applicable requirements within the scope of this inspection before the inspectors left the site.